

# ***Redikorcevia platybunoides* gen. & sp. n., a new harvestman from Kazakhstan, with establishment of a new tribe Scleropilionini trib. n. (Opiliones: Phalangiidae)**

Nataly Yu. Snegovaya<sup>1</sup> & Wojciech Staręga<sup>2</sup>

<sup>1</sup>Zoological Institute NAS of Azerbaijan, proezd 1128, kvartal 504, Baku, AZE1073, Azerbaijan

E-mail: snegovaya@yahoo.com

<sup>2</sup>Institute of Biology, University of Podlasie, Prusa 12, 08-110 Siedlce, Poland

E-mail: wojstar@neostrada.pl

**Abstract** — A new genus and species of Opilioninae (Phalangiidae), *Redikorcevia platybunoides* gen. & sp. n. is described from the mountains of Kazakhstan. A new tribe Scleropilionini trib. n. is established to encompass the new genus and *Scleropilio* Roewer.

**Key words** — Opiliones, Opilioninae, Scleropilionini, Kazakhstan, new tribe, new genus, new species

## **Introduction**

Whilst working out the undetermined collection of Opiliones stored in the Zoological Institute of the Russian Academy of Sciences in Sankt-Petersburg (ZIN) one of us (N.Y.S.) has found a vial containing a strange harvestman from the mountains of Kazakhstan. It revealed to be a member of a new genus and new species of the subfamily Opilioninae. Together with the genus *Scleropilio* Roewer it is separated in a new tribe Scleropilionini.

## **Description**

### ***Redikorcevia* gen. n.**

**Diagnosis.** 1. Body elongate, coriaceous, not sclerotized, at the first glance resembling some species of the genus *Platybunus* C. L. Koch. Body coloration dark brown.  
2. Anterior margin of carapace with a transversal row of sharp tubercles pointing upwards.  
3. Ocular tubercle distant from anterior margin slightly more than its diameter.  
4. Chelicerae not enlarged, normal.  
5. Pedipalps: trochanter with single sharp thorn ventrally; femur with rows of sharp thorns ventrally and dorsally; femur, patella and tibia medio-apically broadened, patella with long apophysis.  
6. Legs of middle length, thin, the first pair not robust, all femora with single dorsal row of long spines.  
7. Penis long and slender, with broad basis and a dorsal keel on the shaft. Glans in profile rounded-triangular, with broader basal part.

**Relationships.** The new genus shall be placed in the subfamily Opilioninae (Staręga 2003) and is nearest to

*Scleropilio* Roewer 1911, but differs from it by: dark body without scutum, longer and slender legs, pedipalps with apophysis on patella. The similarity generally appears in the penis (shaft) structure [particularly to *Scleropilio insolens* (Simon 1895) and some allied species; Tsurusaki et al. 2000, Chemeris & Logunov 2003, Staręga 2003] and the armature of the frontal margin [as in *Scleropilio armatus* (Roewer 1911); Chemeris & Logunov 2003]. For these two genera a new tribe is herein established.

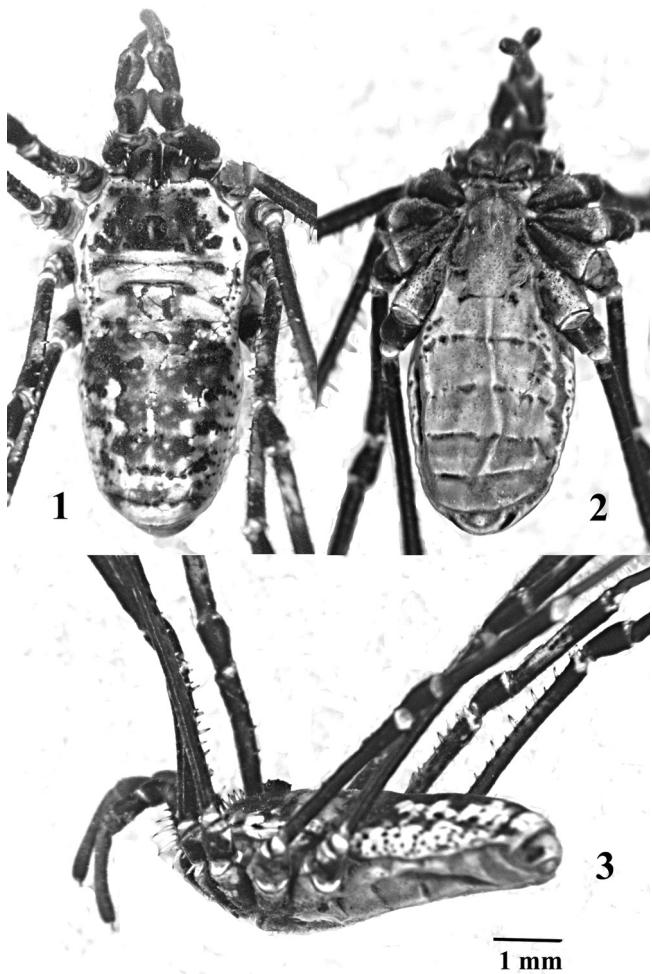
From other genera of Opilioninae (*Opilio* Herbst 1798, *Homolophus* Banks 1893, *Himalphalangium* Martens 1973, *Bidentolophus* Roewer 1912 and *Egaenus* C. L. Koch 1839) the new genus differs by: body shape (not oviform but *Platybunus*-like), long apophysis on palpal patella, structure of thorns on palpal and leg femora and by penis structure (Martens 1973, Staręga 2003). These genera form a separate tribe, Opilionini.

**Type species:** *Redikorcevia platybunoides* sp. n.

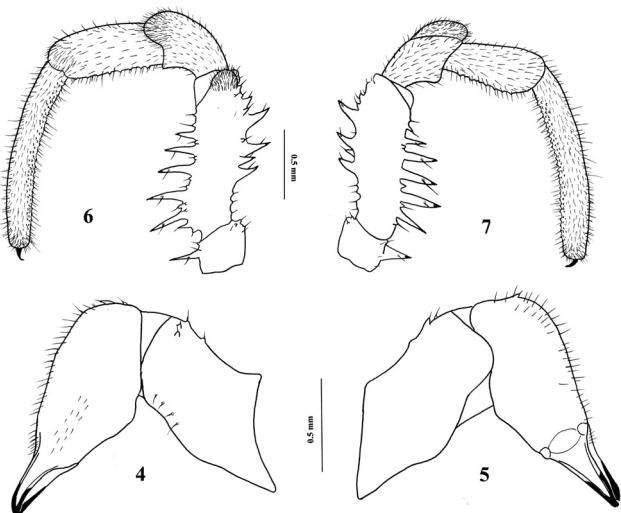
**Etymology.** The new genus is named in honour of V. V. Redikorcev, an author who in the 1930-ties described a lot of harvestmen species from the former Soviet Union (earlier was working on ascidians and pseudoscorpions). The grammatical gender of the name is feminine.

### ***Redikorcevia platybunoides* sp. n. (Figs. 1–10)**

**Description of male (holotype).** Body (Figs. 1–3) 6.3 mm long and 2.8 mm wide, not oviform but resembling the species of *Platybunus*, i.e. elongate, with flat dorsum and strongly narrowing towards the rear end. Anterior margin of carapace with a transversal row of sharp denticles pointing upwards. Two similar denticles situated near coxa III.



Figs. 1–3. *Redikorcevia platybunoides* gen. & sp. n., male, holotype. Dorsal (1), ventral (2) and lateral (3) views of body.



Figs. 4–7. *Redikorcevia platybunoides* gen. & sp. n., male, holotype. Prolateral (4) and retralateral (5) views of right chelicera. Prolateral (6) and retralateral (7) views of right pedipalp.

Body surface coriaceous, smooth, covered with small hairs. Ventral side and coxae covered with setae. Ocular tubercle not enlarged (0.4 mm long, 0.5 mm wide), distant from anterior margin slightly more than its length, bearing 3 hair-tipped denticles on each side.

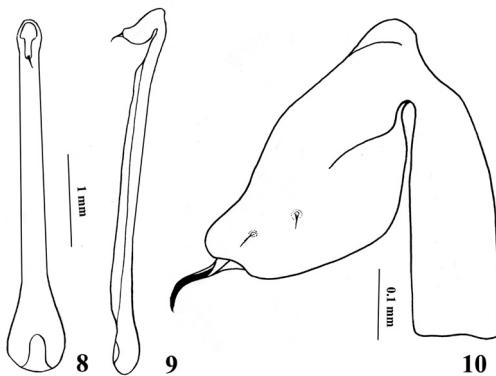
Chelicera (Figs. 4–5) normal, not enlarged. Basal segment dorsally with a group of hair-tipped tubercles and hairs. Distal segment dorsally with hairs and one or two large hair-tipped tubercles on top. Anterior surfaces covered with setae only. Length of basal segment 1.32 mm, distal segment 1.39 mm.

Pedipalps (Figs. 6–7) short, but strong and well armed. Trochanter ventrally with a single long black-tipped thorn bearing a seta on the top. Femur dorsally and ventrally with a single longitudinal row of similar thorns. The ventral thorns are longer than the dorsal ones. Femur also bears small hair-tipped tubercles and hairs. Femur with a distomesal hump richly covered with setae. Patella densely covered with setae, with a large prolateral apophysis. Tibia also bearing a small lateral apophysis, densely covered with setae and ventrally with some denticles. Tarsus covered with setae and hairs, ventrally with a row of black granules. Length of palpal segments: femur 1.39, patella 0.77, tibia 0.81, tarsus 1.65; total length 4.62 mm.

Legs of middle length, strong but not robust. Each femur dorsally with characteristic single row of long thorns, bearing setae latero-apically. Ventrally bearing small hair-tipped denticles and setae. Other parts of legs with setae only. Length of legs: I  $2.74 + 0.87 + 2.61 + 2.61 + 3.70 = 12.53$ , II  $5.56 + 1.04 + 4.67 + 4.17 + 8.46 = 23.90$ , III  $3.05 + 0.87 + 2.48 + 3.09 + 4.77 = 14.26$ , IV  $4.00 + 1.15 + 2.92 + 4.77 + 5.69 = 18.53$ . BLI (Staręga 1972, 2003) 0.927.

Penis (Figs. 8–9) long, slender, heavily sclerotized, with broad basis and a dorsal keel on the shaft. Glans (Fig. 10) in profile rounded-triangular, with broader basal part, laterally with two pairs of small setae. Penis length 4.23, base width 0.73, length of glans 0.43, length of stylus 0.11 mm.

Coloration. Body black-brown with lighter spots, forming a pattern. Coxae black, venter and genital operculum



Figs. 8–10. *Redikorcevia platybunoides* gen. & sp. n., male, holotype. Dorsal (8) and lateral (9) views of penis. Lateral view of glans (10).

lighter with some dark spots. All appendages nearly black, only palpal tarsus lighter. Long thorns on leg femora light (yellowish) with black tips. Penis also black, glans lighter.

Female. Unknown.

*Material:* 2 ♂♂ (holotype and paratype), Kazakhstan, [Zailiyskiy Alatau Ridge south of Almaty], Bolshaya Almaatinka [Valley], Peak Almaatinsky (ca. 4000 m), under stones, 27. July 1938 leg. V. N. Shnitnikov (ZIN).

### *Scleropilionini* trib. n.

Within the subfamily Opilioninae one can distinguish two different groups of genera. To the first belong the genera: *Opilio* Herbst 1798, *Homolophus* Banks 1893, *Bidentolophus* Roewer 1912, *Himalphalangium* Martens 1973 and *Egaenus* C. L. Koch 1839. They share oviform bodies with normal integument, pedipalps without strong thorns on femora and penis shaft with sclerotized margins, mostly flattened and with different modifications of apical portion. It is herein regarded as the tribe Opilionini.

The other group encompasses only two genera: *Scleropilio* Roewer 1911 and *Redikorcevia* gen. n. The body integument is here either coriaceous or heavy sclerotized (with dorsal scutum). The frontal margin of carapace with a row of strong denticles pointing forwards or upwards. Palpal femora with strong thorns ventrally and — in some

species — dorsally. Penis with heavily sclerotized shaft, mostly with a dorsal keel and spade-like (flattened and broadened) basis. It is herein regarded as a new tribe, *Scleropilionini* trib. n. Typical genus is *Scleropilio* Roewer 1911.

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